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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,680	12/05/2003	Ivan Jesus Fernandez-Corbaton	030319	9070

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QUALCOMM INCORPORATED
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EXAMINER
MANOHARAN, MUTHUSWAMY GANAPATHY

ART UNIT	PAPER NUMBER
2617	

NOTIFICATION DATE	DELIVERY MODE
02/22/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Advisory Action Before the Filing of an Appeal Brief	Application No. 10/728,680	Applicant(s) FERNANDEZ-CORBATON ET AL.	
	Examiner Muthuswamy G. Manoharan	Art Unit 2617	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 02 January 2008 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____

Claim(s) objected to: _____

Claim(s) rejected: _____

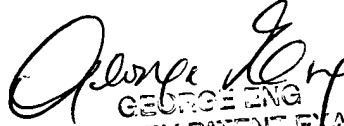
Claim(s) withdrawn from consideration: _____

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
please refer continuation sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____


GEORGE ENG
SUPERVISORY PATENT EXAMINER

Response to Arguments

Examiner respectfully disagrees with applicant's assertion on page 11 with the remarks, "Ayoma does not disclose "using the quality metric" that is "received ... from a remote station" to "adaptively allocate a fixed amount of power between the traffic signal and the dedicated reference signal," as recited in claim 1.

Contrary to applicant's assertion, Aoyama teaches, " means for receiving a quality metric from a remote station, wherein the quality metric indicates the quality of a signal transmitted from the base station and received by the remote station ("**CIR**", **carrier to interference ratio**, reads on quality metric recited in claim 1; Paragraph [0077], Figure 8-10); means for using the quality metric to adaptively allocate a fixed amount of power between the traffic signal and the dedicated reference signal to maximize the capacity for transmitting the traffic signal to the remote station ("**the total transmission power is fixed**", "**the transmission power ratio between code-multiplexed transmit data and a dedicated pilot signal is controlled in accordance with the propagation environment**", Paragraph [0139]).

Examiner respectfully disagrees with applicant's assertion on page 11 with the remarks, "the signal indicating the state of propagation environment" does not possess all the of the characteristics of the "quality metric" that are set forth in claim 1. For example, the "signal indicating the state of the propagation environment" in Aoyama does not "indicate[] the quality of a signal transmitted from the base station in a common reference signal and received by the remote station," as recited in claim 1".

Aoyama teaches, "Carrier to interference ratio" which is a quality metric that indicates the quality of signal transmitted from the base station in a common reference signal and received by the remote station.

Examiner respectfully disagrees with applicant's assertion on page 12 with the remarks, "Thus, this portion of Aoyama refers to a "CIR," which stands for "Carrier to Interference Ratio." See Aoyama, paragraph [0007]. The Examiner appears to be asserting that the "CIR" is a "quality metric" within the meaning of claim 1. Even if this assertion is correct, Aoyama does not disclose "using the [CIR] to adaptively allocate a fixed amount of power between the traffic signal and the dedicated reference signal," as recited in claim 1. Claim 1 does not merely recite a "quality metric"; rather, claim 1 recites "means for receiving a quality metric from a remote station" and "means for using the quality metric to adaptively allocate a fixed amount of power between the traffic signal and the dedicated reference signal." Aoyama does not disclose this claimed subject matter. In view of the foregoing, Applicant respectfully submits that claim 1 is allowable. Accordingly, Applicant respectfully requests that the rejection of claim 1 be withdrawn".

CIR could be a quality metric and the limitation of claim does not preclude one from using CIR as a quality metric. The claim limitations are broadly interpreted. Aoyama further teaches "the DRC signal is ... transmitted to the base station apparatus as a radio signal from the antenna via the transmit /receive duplexer" (Paragraph [0064]) The DRC signal contains the information that is related to the quality metric (Paragraph [0063]). Aoyama further teaches, "communication resource allocation to

each communication terminal apparatus is determined by the transmission destination determination section based on the DRC signal" (Paragraph [0066]).

In view of the above reasoning it is apparent that Aoyama teaches all the limitations of claim 1 as described in the Office action.

Examiner respectfully disagrees with applicant's assertion on page 13 with the remarks, "Claim 11 is directed to Applicant respectfully submits that Aoyama does not disclose this claimed subject matter. .

As indicated above, Aoyama describes a "base station apparatus 800" that includes a "reception level measurement section 801 ." Aoyama, paragraphs [0140], [0144]. Aoyama states that "[e]ach reception level measurement section 801 ... determines the state of the propagation environment ... [and] outputs a signal indicating the state of the propagation environment"Id. However, as discussed above, the "signal indicating the state of the propagation environment" in Aoyama is not a "quality metric," because the "signal indicating the state of the propagation environment" in Aoyama does not "indicate[] the quality of a signal transmitted from the base station in a common reference signal and received by the remote station," as recited in claim 11. Moreover, in Aoyama it is the "base station apparatus 800" that "determines the state of the propagation environment." This is in direct contrast to claim 11, which recites that the "remote station ... determin[es] a quality metric of the received common reference signal" and "transmit[s] the quality metric to the base station."

The signal indicating the state of the propagation environment could be quality metric. The claim limitations are broadly interpreted. Aoyama further teaches "the DRC

signal is ... transmitted to the base station apparatus as a radio signal from the antenna via the transmit /receive duplexer" (Paragraph [0064]). The DRC signal contains the information that is related to the quality metric (Paragraph [0063]). Aoyama further teaches, "communication resource allocation to each communication terminal apparatus is determined by the transmission destination determination section based on the DRC signal" (Paragraph [0066]).

In view of the above reasoning it is apparent that Aoyama teaches all the limitations of claim 1 as described in the Office action.

Examiner respectfully disagrees with applicant's assertion on page 15 with the remarks, "the cited references do not teach or suggest the claimed subject matter".

Farlow teaches means for transmitting a parameter to the remote station, wherein the parameter e_x represents the portion of the resource allocated to the dedicated reference signal (**Page 10, lines 20-25**). The training sequence interval (reads on the "n", the duration of n slots") and training sequence length (reads on number of taps, L) parameters are used to control the insertion of training sequences. The teachings of Farlow include specifying the parameter that could control the portion of the resource allocated to the dedicated reference signal.

Also, Aoyama further teaches, "Here, total transmission power is fixed in HDR. ... transmission power ratio between code multiplexed transmit data and a dedicated pilot signal is controlled in accordance with the propagation environment" (Paragraph [0139]). Therefore, Aoyama teaches the portion of the resource allocated to the dedicated reference signal.

Farlow teaches (as mentioned above), training sequence offset, training sequence interval and training sequence length and these parameters are use to calculate the number of tap coefficients L .

In view of above, it is apparent that Aoyama in view of Farlow teaches the limitations of claim 7.

Examiner respectfully disagrees with applicant's assertion on page 18 with the remarks, "Frank does not teach or suggest that the parameter $(L-1)/n$.. from the remote station".

Aoyama further teaches, "Here, total transmission power is fixed in HDR. ... transmission power ratio between code multiplexed transmit data and a dedicated pilot signal is controlled in accordance with the propagation environment" (Paragraph [0139]). Therefore, Aoyama teaches the portion of the resource allocated to the dedicated reference signal.

Frank teaches those parameters that are required for the equalizer such as the number of equalizer taps L and also the chip rate n (Col. 4, lines 33-63). Aoyama further teaches transmitting the DRC signal indicating the relevance transmission rate (paragraph [0063]).

Therefore, it would be obvious to one of ordinary skill in the art at the time of invention to transmit the parameter $(L-1)/n$ to the base station in order for the base station to allocate the transmission power ratio between code multiplexed transmit data and a dedicated pilot signal is controlled in accordance with the propagation environment.